

What is Claimed is:

1. A ball pocket bladder adapted for disposing in a ball carcass of a stitching ball for propping up and supporting said ball carcass, comprising:

an inflatable bladder having a valve stem extended therefrom; and

5 a construction ball pocket, which is made of fabric material and integrally constructed to form a hollow round ball body without stitching, having an interior receiving cavity defined therein to sealedly receive said inflatable bladder inside and a valve hole for said valve stem extended therethrough to an exterior of said construction ball pocket, wherein said construction ball pocket is arranged to retain a true roundness
10 shape of said inflatable bladder after said inflatable bladder is inflated.

2. The ball pocket bladder, as recited in claim 1, wherein said ball pocket comprises a plurality of ball pocket leaves integrally connected edge to edge together to form said construction ball pocket having a spherical shape.

3. The ball pocket bladder, as recited in claim 2, wherein said ball pocket
15 leaves are connected with each other by overlapping and integrally bonding edge sections of each of said ball pocket leaves with said edge sections of said adjacent ball pocket leaves therearound by means of vulcanization with heat.

4. The ball pocket bladder, as recited in claim 2, wherein said construction ball pocket is made by the steps of:

20 (a) providing said plurality of ball pocket leaves each having an adhesive ability and a predetermined shape;

(b) integrally connecting said ball pocket leaves edge with edge together by overlapping edge sections of one of said ball pocket leaves with said adjacent ball pocket leaves therearound so as to form said hollow round ball body defining said receiving
25 cavity therein, wherein one of said ball pocket leaves is remained unattached to form an inlet opening;

(c) inserting said inflatable bladder into said hollow round ball body through said inlet opening; and

(d) sealing said inlet opening with said ball pocket leaf remained unattached in the step (b) for sealedly enclosing said receiving cavity said hollow round ball body.

5 5. The ball pocket bladder, as recited in claim 4, wherein in the step (a), each of said ball pocket leaves is soaked with said adhesive material until meshes of said ball pocket leaf are filled with said adhesive material.

6. The ball pocket bladder, as recited in claim 5, wherein the step (a) further comprises the steps of:

10 (a.1) soaking a large piece of cotton and polyester mixture fabric cloth into said adhesive material until meshes of the fabric cloth are filled with said adhesive material; and

(a.2) die-cutting said fabric cloth into said plurality of the ball pocket leaves.

15 7. The ball pocket bladder, as recited in claim 5, wherein the step (b) further comprises the steps of:

(b.1) applying a removing agent on a spherical surface of an inflated spherical mold bladder having a true roundness shape;

20 (b.2) placing said ball pocket leaves on said spherical surface of said mold bladder in such a manner that said edge sections of each of said ball pocket leaves are overlappedly adhered with said edge sections of said adjacent ball pocket leaves placed therearound; and

(b.3) vulcanizing said ball pocket leaves on said mold bladder with heat for integrally bonding said ball pocket leaves together to form said hollow round ball body having said inlet opening provided thereon.

8. The ball pocket bladder, as recited in claim 7, wherein said mold bladder has a plurality of guiding sections formed on an outer spherical surface thereof for guiding each of said ball pocket leaves to place on said mold bladder.

5 9. The ball pocket bladder, as recited in claim 7, wherein the step (b) further comprises the step of:

(b.4) releasing a compression air inside said inflated mold bladder to shrink said mold bladder; and

(b.5) removing said mold bladder from said hollow round ball body through said inlet opening.

10 10. The ball pocket bladder, as recited in claim 4, after the step (b) and before the step (c), further comprising a step of applying a removing agent on said inflatable bladder.

15 11. The ball pocket bladder, as recited in claim 9, after the step (b) and before the step (c), further comprising a step of also applying said removing agent on said inflatable bladder.

12. The ball pocket bladder, as recited in claim 7, wherein the step (d) further comprises the steps of:

20 (d.1) covering said inlet opening on said hollow round ball body by adhering said edge sections of said ball pocket leaf remained unattached in the step (b) with said edge sections of said adjacent ball pocket leaves positioned therearound; and

(d.2) vulcanizing said construction ball pocket with heat for integrally enclosing said inlet opening of said construction ball pocket and securely receiving said inflatable bladder therein.

25 13. The ball pocket bladder, as recited in claim 11, wherein the step (d) further comprises the steps of:

(d.1) covering said inlet opening on said hollow round ball body by adhering said edge sections of said ball pocket leaf remained unattached in the step (b) with said edge sections of said adjacent ball pocket leaves positioned therearound; and

5 (d.2) vulcanizing said construction ball pocket with heat for integrally enclosing said inlet opening of said construction ball pocket and securely receiving said inflatable bladder therein.

14. The ball pocket bladder, as recited in claim 7, wherein the step (d) further comprises the steps of:

10 (d.1) covering said inlet opening on said hollow round ball body by adhering said edge sections of said ball pocket leaf remained unattached in the step (b) with said edge sections of said adjacent ball pocket leaves positioned therearound to form a first layer of ball pocket leaves;

(d.2) overlappedly adhering a second layer of ball pocket leaves on said first layer of ball pocket leaves; and

15 (d.3) vulcanizing said first and second layers of ball pocket leaves with heat until all said ball pocket leaves are integrated to form an integral layer to form said construction ball pocket.

15. The ball pocket bladder, as recited in claim 11, wherein the step (d) further comprises the steps of:

20 (d.1) covering said inlet opening on said hollow round ball body by adhering said edge sections of said ball pocket leaf remained unattached in the step (b) with said edge sections of said adjacent ball pocket leaves positioned therearound to form a first layer of ball pocket leaves;

25 (d.2) overlappedly adhering a second layer of ball pocket leaves on said first layer of ball pocket leaves; and

(d.3) vulcanizing said first and second layers of ball pocket leaves with heat until all said ball pocket leaves are integrated to form an integral layer to form said construction ball pocket.

5 16. The ball pocket bladder, as recited in claim 14, wherein each of said ball pocket leaves of said second layer of ball pocket leaves is arranged and aligned to be placed perpendicularly to said respective ball pocket leaf of said first layer of ball pocket leaves which is positioned right below.

10 17. The ball pocket bladder, as recited in claim 15, wherein each of said ball pocket leaves of said second layer of ball pocket leaves is arranged and aligned to be placed perpendicularly to said respective ball pocket leaf of said first layer of ball pocket leaves which is positioned right below.

18. A method for manufacturing a ball pocket bladder, adapted for disposing in a ball carcass of a stitching ball for propping up and supporting said ball carcass, comprising the steps of:

15 (a) providing a plurality of ball pocket leaves each having an adhesive ability and a predetermined shape;

20 (b) integrally connecting said ball pocket leaves edge with edge by overlappingly attaching edge sections of each of said ball pocket leaves with said adjacent ball pocket leaves therearound so as to form a hollow round ball body defining said receiving cavity therein, wherein one of said ball pocket leaves is remained unattached to form an inlet opening;

(c) inserting an inflatable bladder into said hollow round ball body through said inlet opening; and

25 (d) sealing said inlet opening with said ball pocket leaf remained unattached in the step (b) for sealedly enclosing said receiving cavity said hollow round ball body to form said ball pocket bladder.

19. The method, as recited in claim 18, wherein the step (a), each of said ball pocket leaves is soaked with said adhesive material until meshes of said ball pocket leaf are filled with said adhesive material.

5 20. The method, as recited in claim 17, wherein the step (a) further comprises the steps of:

(a.1) soaking a large piece of cotton and polyester mixture fabric cloth into said adhesive material until meshes of the fabric cloth are filled with said adhesive material; and

(a.2) die-cutting said fabric cloth into said plurality of the ball pocket leaves.

10 21. A stitching ball, comprising:

an inflatable bladder having a valve stem extended therefrom;

15 a construction ball pocket, which is made of fabric material and integrally constructed to form a hollow round ball body without stitching, having an interior receiving cavity defined therein to sealedly receive said inflatable bladder inside and a valve hole for said valve stem extended therethrough to an exterior of said construction ball pocket, wherein said construction ball pocket is arranged to retain a true roundness shape of said inflatable bladder after said inflatable bladder is inflated; and

20 a ball carcass, which comprises a plurality of carcass panels sewn edge to edge together, receiving said construction ball pocket therein and having a stem hole for said valve stem attached thereto, wherein said inflatable bladder is capable of popping up and supporting said ball carcass after said inflatable bladder is inflated.

22. The stitching ball, as recited in claim 21, wherein said construction ball pocket comprises a plurality of ball pocket leaves integrally connected edge to edge together to form said construction ball pocket having a spherical shape.

25 23. The stitching ball, as recited in claim 22, wherein said ball pocket leaves are connected with each other by overlapping and integrally bonding edge sections of

each of said ball pocket leaves with said edge sections of said adjacent ball pocket leaves therearound by means of vulcanization with heat.

24. The stitching ball, as recited in claim 22, wherein said ball carcass further comprises a plurality of cushion pads which are shaped to fittingly attach under said
5 carcass panels respectively.

25. The stitching ball, as recited in claim 23, wherein said ball carcass further comprises a plurality of cushion pads which are shaped to fittingly attach under said carcass panels respectively.